

1-61. (Cancelled)

62. (New) An instrument for testing a CATV network, the instrument including a microcomputer ( $\mu$ C) for controlling the instrument, a memory coupled to the  $\mu$ C, a keypad user interface coupled to the  $\mu$ C, a digital signal processor (DSP) coupled to the  $\mu$ C to be controlled thereby, an RF section, an analog-to-digital (A/D) converter coupled to the RF section and to the DSP, and an audio transducer coupled to the  $\mu$ C and to the DSP.

63. (New) The instrument of claim 62 further including a temperature sensor coupled to the  $\mu$ C.

64. (New) The instrument of claim 62 further including a display controller and a display coupled to the  $\mu$ C.

65. (New) The instrument of claim 62 further including an RS-232 port coupled to the  $\mu$ C.

66. (New) The instrument of claim 65 further including a bar code scanner adapted to be coupled to the RS-232 port to enter scanned bar codes through the instrument to CATV network.

67. (New) The instrument of claim 62 further including a signature pad coupled to the  $\mu$ C.

68. (New) The instrument of claim 62 further including a port adapted to be coupled to an ethernet interface.

69. (New) The instrument of claim 62 further including a second memory coupled to a port of the  $\mu$ C.

70. (New) The instrument of claim 62 further including a direct digital synthesizer (DDS) coupled to the DSP to be controlled thereby, the DDS adapted to generate RF oscillations at an output port of the instrument.

71. (New) The instrument of claim 62 further adapted to be queried via the CATV network, and when queried to respond by transmitting on the CATV network.

72. (New) The instrument of claim 71 adapted to respond by transmitting at a queried frequency plus some offset.

73. (New) The instrument of claim 72 adapted to respond by transmitting at the queried frequency plus multiple frequencies offset from the queried frequency to permit multiple instruments to respond to the query simultaneously.

74. (New) The instrument of claim 71 adapted to respond by transmitting first at a relatively lower amplitude; and then to increase the amplitude of its transmission a predetermined amount above the relatively lower amplitude upon receipt of a signal

indicating that its relatively lower amplitude response is below a minimum acceptable amplitude.

75. (New) The instrument of claim 73 adapted, after responding first at a relatively lower amplitude and after continuing to increase the amplitude of its transmission in increments above the relatively lower amplitude until it receives a signal that the amplitude of its response is a minimum acceptable amplitude, to then lower the amplitude of its response and to await confirmation that the lower amplitude signal was received, and then to return its transmitted signal amplitude to the minimum acceptable amplitude.

76. (New) The instrument of claim 71 adapted to respond first at a relatively lower amplitude; and then to increase the amplitude of its response to an amplitude calculated to place the received amplitude from the instrument within a window of acceptable amplitude.

77. (New) The instrument of claim 76 adapted, after responding first at a relatively lower amplitude and after raising the amplitude of its transmission above the relatively lower amplitude and receiving a signal that the amplitude of its response is within the window of acceptable amplitude, to lower the amplitude of its response and to await confirmation that the received signal displays the same lower amplitude signal level, and then to return the amplitude of its transmission to the window of acceptable amplitude.